Control Number : GOOG-DOJ-14298902

All Custodians : Vip Andleigh

Custodian: Vip Andleigh

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File Name: Awbid

Overview_1hqkT9rrOweIYqYn20 2CUE3wpYXOrpiH11Qm6E19E-ug.

pptx





Product Overview

What is AWBid?

- Google Display Ads (GDA) buying inventory on third-party ad exchanges (non-AdX). Awbid also bids on the other S2S channel: yavin a.ka. demand product.
- Originally launched for remarketing ads, expanded to topic, inmarket, affinity, icm vertical, and CIA/CIM targeting types in late 2018 & early 2019.
- There is no advertiser control.

Go M Com Service & Processes

- Why it was launched originally for remarketing only?
- Remarketing is where Adwords faces the most competitive pressure and most benefit from additional reach. Majority of remarketing advertisers are not budget constrained and want more conversion volume.
- Greatly reduces concerns about impact to publisher business.
- Simplifying targeting helps meet tight exchange response deadlines
- Back in 2014, 2015 GDA remarketing was facing stiff competition from industry; We also lost a few head to head tests with GDA competitors. One of the reasons was not having access to diverse inventory. Awbid's primary goal since its start has been to increase the inventory access to GDA remarketing & dynamic remarketing customers. That continues to be the mission of the team & product. In 2017/2018, we have also started focussing on growing net revenue (margin optimization, expansion to rest of the GDA ad demand)

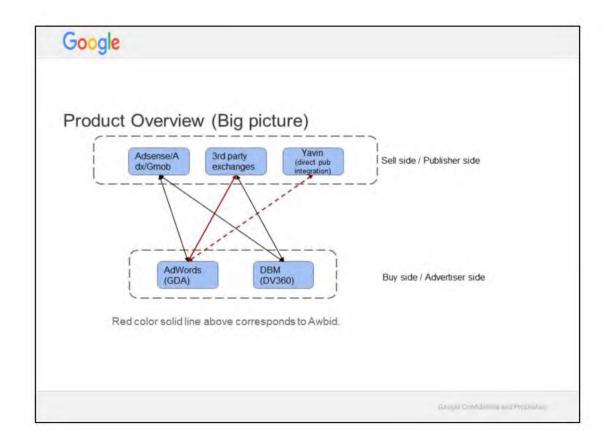


Terminology, Acronyms, Synonyms

- Buyer/buyside/demand usually represents advertiser. Seller/sellside/publisher/pub/inventory usually represents a
 website or app where they have allocated some space for ads. (So, a transaction is that buyer is buying a space
 from seller to show the ad).
- GDA: Google Display Ads (display part of Google Ads which was previously known as Adwords)
- Third party ad-exchange: Any ad-exchange that is not part of the Google Network (AdSense, AdMob, and Ad Exchange). Synonyms: 3p exchange, 3PE, cross-exchange, external exchange
- DV360: DV360 stands for Display & Video 360, formerly known as DBM / DoubleClick Bid Manager. It can be viewed as sister product for GDA. DV360 allows advertisers to buy inventory from Google partner inventory, and third-party exchanges. Synonyms: DV3, DBM, XBid, Skyray, etc.
- Yavin: Invite-only product for publishers which enables buyer (GDA, DV360) to directly integrate with pubs using S2S connection (opentb interface). Its also known as 'Google Ad Connector'.

Carryll Combining and Propriety





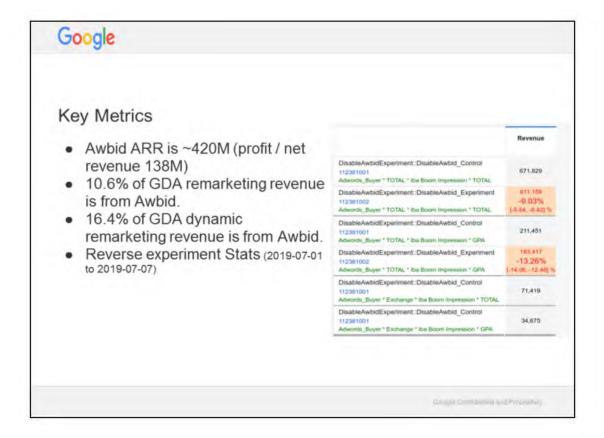


In Awbid type2 serving, serving is split into two passes:

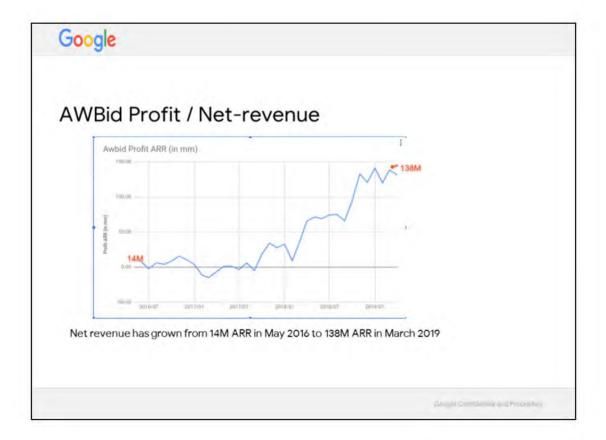
In first pass, we respond to exchange with bid and tag that contains adgroup-creativeid & other metadata that is needed to run the second pass. If awbid ad wins the auction, then the tag is rendered on the browser, which makes a call to bow & initiates seconds pass. In second pass, creative fetch & fulfillment of the given creative id is done.

(Skip: Implement a lightweight creative fetch flow to fetch a given adgroup creative from the stack.)





Reference: https://screenshot.googleplex.com/4gMjb7Mt6EK



Net revenue has grown from 14M ARR in May 2016 to 138M ARR in March 2019

Some stats

- · QPS: 3M qps
- 550-600kqps bids submitted to exchanges
- >50 Exchanges launched, including Appnexus, Rubicon, OpenX, Index and Pubmatic (RightMedia is just about to sign contract)
- Win rate: 3%
- Latency: 111ms 95%@BOW for matched queries
- · 9%-10% remarketing impact from reverse

100ms for 95%le @ bow for all exchange matched queries, 109ms for awbid matched queries. Most of the awbid eligible queries are also eligible for dbm, and hence they consume more latency. Reference:

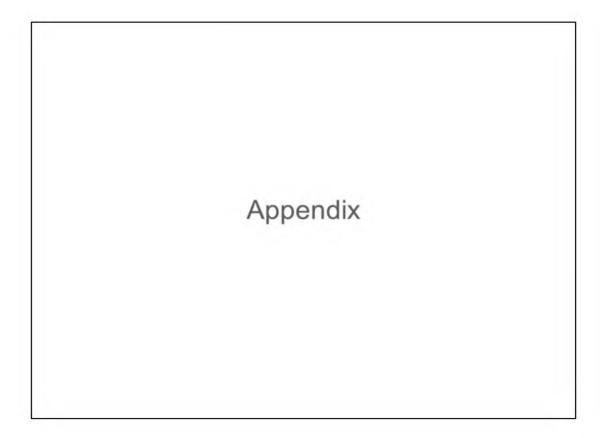
https://rasta.corp.google.com/#/metrics?label=_:GgmzdmryRnvGSiGhfN2QdQ4zsuM

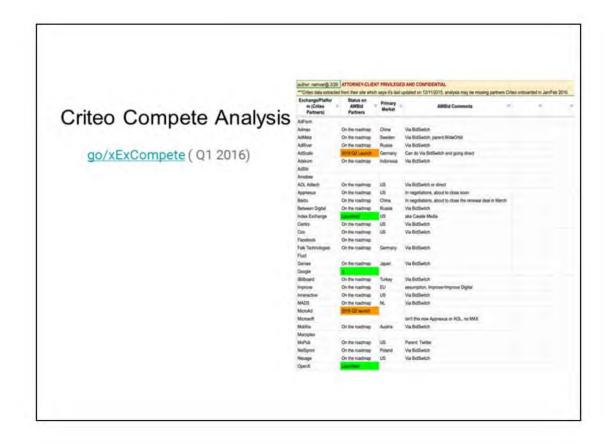
Awbid challenges

- · Latency: around 100ms deadline
- · Spam: it's a wild world out there
- · Cookie matching: >30% queries lost due absence of matched biscotti
- · Safari ITP, GDPR etc. are much harder to solve in 3p ecosystem.
- Brand safety / domain misrepresentation
- Exchange policies on data use: no cross-exchange profile building, exchange coop still in progress
- . Privacy: due to stale cookie match, actual user cookie could be opt out
- Weird auctions: soft/dynamic floors (less auction discount)
- Exchange bills discrepancy aka view loss

Awbid challenges (contd.)

- Exchange publisher blocks, format requirements, click pricing problems, creative review/registration, and more...
- Publisher Quality: old enforcement system too aggressive without direct pub relationship (addressed to large extend with PQ2.0 launched in late 2016)





Rasta Tips

Awbid slice: Adwords buyer x content type = Exchange

https://screenshot.googleplex.com/PKROFJdNF03

Matched query latency: (buyer = None + remaining) x external exchange eligibility type x backend latency metrics (not performance metrics)

https://screenshot.googleplex.com/XERJrjb3QsZ

Don't use exchange eligibility slice for quality stats, unless you really know what's going on!:)

Awbid References

go/awbid team site, awbid-eng@ mailing list
go/awbid-console - production console
go/awbid-dremel for information on logs, sample queries
go/awbid-debug, go/awbid-bow-debug - to replay a debug request